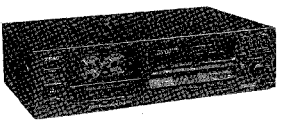
TEAC



SERVICE MANUAL

V-870

STEREO CASSETTE DECK

1 SPECIFICATIONS

仕様

Track System 4-Track, 2-Channel Stereo
Heads 3: 1 Erase, 1 Record and 1 Playback (Combination)
Type of Tape Cassette tape C-60 and C-90 (Philips type)
Tape Speed 4.76 cm/sec. (1-7/8 ips)
Motors 3: 1 DC Servo motor (for capstan drive)
1 DC motor (for reel drive)
1 DC motor (for ancillary control)
Wow and Flutter (WRMS) 0.025 %
Frequency Response (Overall) −20 dB
20 – 21,000 Hz Metal Tape (25 – 20,000 Hz ± 3 dB)
20 – 20,000 Hz CrO_2 Tape (25 – 19,000 Hz ±3 dB)
20 – 18,000 Hz Normal Tape (25 – 17,000 Hz ±3 dB)
Signal-to-Noise Ratio (Overall)
60 dB (3% THD Level, Weighted)
70 dB (Dolby B In, over 5 kHz),
80 dB (Dolby C In, over 1 kHz),
Fast Winding Time Approximately 100 seconds for C-60

Inputs Line: 60 mV, 50k ohms
Outputs Line: 0,3 V for load impedance of 50k ohms or more
Headphones: 8 ohms
Power Requirements 120/220/240 V AC, 50/60 Hz (General export models)
120 V AC, 60 Hz (U.S.A./Canada)
220 V AC, 50 Hz (Europe)
240 V AC, 50 Hz (U.K./Australia)
Power Consumption 27 W
Dimensions (W x H x D)
435 x 123.5 x 279.5 mm (17-1/8" x 4-7/8" x 11")
Weight 5.9 kg (13.01 lbs) net
Standard Accessories
Input-output connection cords

- Specifications were determined using metal tape except as noted.
- Improvements may result in specifications or features changing without notice.
- Photos and illustrations may differ slightly from production models.

NOTES:
Improvements may result in SPECIFICATIONS changes.
Value of "dB" in the data refers to 0 dB (0.775 V), except where Specified.

注
1．仕様は改善のため，予告なく変更することがあります。
2．本マニュアルの 0 dB は0.775 Vを基準としています。

CAUTION
⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components – refer to the appropriate parts list and ensure exact replacement.

注 意
⚠印は安全重要部品です．交換する時は必ずティアック指定の部品を使用してください。

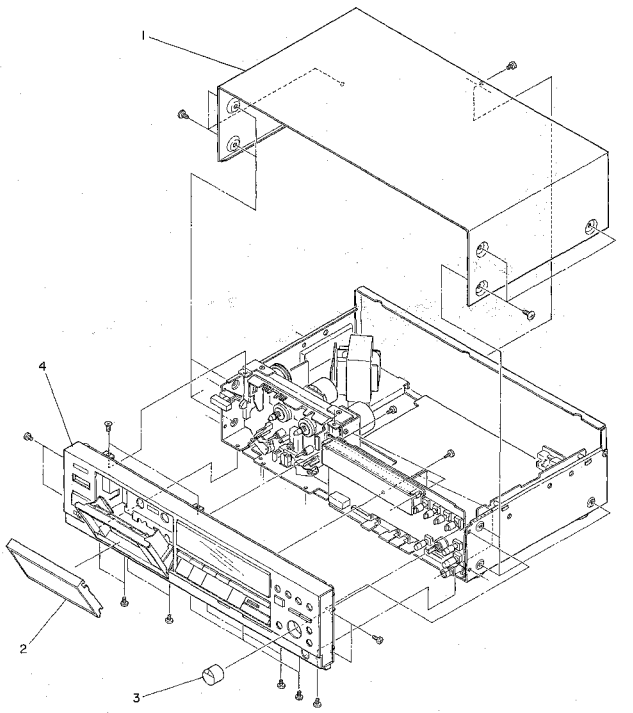
- Dolby Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

- ドルビーノイズリダクションシステムは，ドルビー研究所からの実施権に基づき製造されています。
- ドルビー及び ⊡⊡ は，ドルビー研究所の登録商標です。

2 REMOVAL OF EXTERNAL COMPONENTS

外装部品の外し方

Disassemble in number-order
番号順に外して下さい



3 PARTS LOCATION

部品配置図

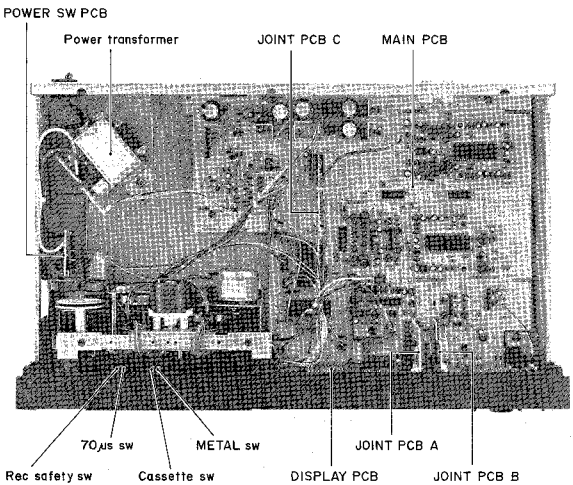


Fig. 3-1 Top view 上面図

4 MECHANICAL ADJUSTMENTS AND CHECKS

機構部の調整と確認

4-1 PINCH ROLLER PRESSURE

1. Press the cassette switch (see Fig. 3-1) up to set the deck to the playback mode.
   The cassette switch should be pressed up throughout measurement.
2. Hang the spring scale from the pinch roller arm.
3. Extend the spring in the direction shown in the figure until the rotation of the pinch roller stops, then return it gradually so that the pinch roller comes into contact with the capstan shaft again.
4. Read the value at the moment the pinch roller starts rotating.
   Standard values
   Take-up side : 390 g – 490 g (13.8 oz – 17.3 oz)
   Supply side : 170 g – 230 g (6.0 oz – 8.1 oz)

4-1 ピンチ・ローラ圧着力

1. カセット・スイッチ (Fig. 3-1 参照) を上方に押してプレイ・モードにする.
   測定中, カセット・スイッチは上方に押し続けること.
2. ピンチ・ローラ・アームにバネ秤を掛ける.
3. 秤をピンチ・ローラの回転が止まるまで図示の方向に引張った後, ピンチ・ローラが再びキャプスタン・シャフトに接触するよう徐々に戻す.
4. ピンチ・ローラが回り始めるときの値を読む.
   規格値 テイクアップ側 : 390 g ～ 490 g
   サプライ側 : 170 g ～ 230 g

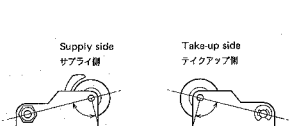


Fig. 4-1 Pinch roller pressure measurement ピンチ・ローラ圧着力測定

4-2 TAPE PATH ADJUSTMENT

Note: The following special tools and tapes are required for this section.
Head check jig A (P/N 5736006600)
Head check jig B (P/N 5736006700)
MTT-150 test tape (for Dolby level calibration)
MTT-356 (or MTT-256) test tape (for frequency response check)
MTT-902 mirror tape (C-90 type)

4-2 テープ走行調整

注：この調整を行うために次の治具, テスト・テープが必要です。
ヘッド治具A (P/N: 5736006600)
ヘッド治具B (P/N: 5736006700)
MTT-150 テスト・テープ(ドルビー・レベル・セット用)
MTT-356 (又はMTT-256) テスト・テープ(周波数特性測定用)
MTT-902 ミラー・テープ (C-90型)

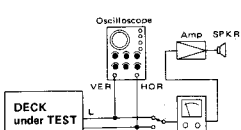


Fig. 4-2 Test setup for azimuth adjustment
アジマス調整接続

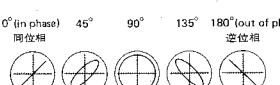


Fig. 4-3 Confirming phase relationship
位相関係図

Note 1: When the record/playback head has been replaced, tighten screws (A), (B), (C) shown in Fig. 4-6 until they stop, then slacken them by 1-1/2 turns before starting alignment.

Note 2: When the erase head has been replaced, install it as shown in Fig. 4-6'.

1. Attach head position alignment jigs A and B, then set the deck to the play mode.
2. Fit jig B on the tape guide of the record/playback head as shown in Fig. 4-5, then align the height with screw (A) as shown in Fig. 4-6.
3. Fit jig B to the head as shown in Fig. 4-5 to check its tilt and align it using screws (B) and (C) shown in Fig. 4-6. Then align the height again with screw (A).
4. Repeat alignments in procedure 2 and 3 two or three times to align height and tilt. (When adjusted to the standard height, the head should be under the tape guide.)
5. Fit jig B to the tape guide of the left pinch roller and align the height with nut (E). (The standard height is above the tape guide.)
6. Play test tape MTT-902, and adjust nut (E) so that the lower edge of the tape guide of the record/playback head is in contact with the tape edge, but the tape is not curled.
7. Adjust the azimuth of the playback head with screw (C) shown in Fig. 4-6 according to item 5-3 (on page 15). If the screw is rotated by half a turn or more, turn screws (A) and (B) by the same amount then align again from item 6 to correct the height of the tape guide of the record/playback head.
8. Adjust the azimuth of the record head with screw (D) shown in Fig. 4-6 according to item 5-5. (Refer to page 18.) Screw (D) should not be turned more than half a turn.
9. After alignment is complete, check that the tape does not curl over the tape guide by repeating play and stop operations.

注 1. 録・再ヘッドを交換したときは，Fig. 4-6 のネジ (A)，(B)，(C) が止まるまで締め，その位置からそれぞれのネジを 1.5 回転ゆるめた状態で調整を始めること．

注 2. 消去ヘッドを交換したときは，Fig. 4-6' のように取付ける．

1. ヘッドの位置調整治具 A，B をセットしプレイ・モードにする．
2. Fig. 4-4 のように録・再ヘッドのテープ・ガイドに治具 B を当て，Fig. 4-6 のネジ (A) で高さを調整する．
3. Fig. 4-5 のように治具B をヘッドに当ててチルトを確認し，Fig. 4-6 のネジ (B)，(C) で調整した後，再度ネジ (A) で高さを調整する．
4. 上記 2，3 項の調整を 2～3 回繰り返し，高さ，チルトを調整する．（高さの基準はテープ・ガイドの下側とする）．
5. 左ピンチ・ローラのテープ・ガイドに治具 B を当て，ナット (E) で高さを調整する．（高さの基準はテープ・ガイドの上側とする）．
6. テスト・テープ MTT-902 を走行させ，録・再ヘッドのテープガイドの下側がカールしない程度に当たるようナット (E) を調整する．
7. 再生ヘッドのアジマスを 5-3 項（ 11 ページ参照 ）に従って Fig.4-6 のネジ (C) で調整する．
1/2 回転以上回したときは録・再ヘッドのテープ・ガイド高さを合わせるため，ネジ (A)，(B) も同量回し再度6 項に戻り調整をやりなおす．
8. 録音ヘッドのアジマスを 5-5項（ 13 ページ参照 ）に従って Fig. 4-6 のネジ (D) で調整する．
ネジ (D) の調整範囲は 1/2 回転以内とする．
9. 全ての調整の後，プレイ・ストップを繰り返し，テープ・ガイドでテープがカールしないことを確認する．

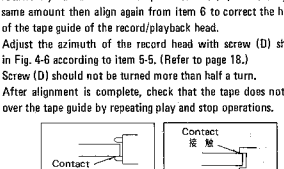


Fig. 4-4

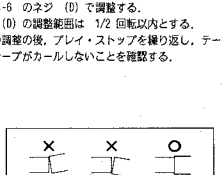


Fig. 4-5

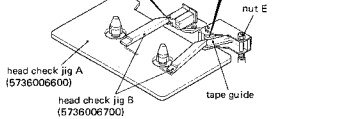


Fig. 4-6

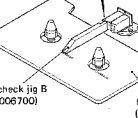


Fig. 4-6'

4-3 REEL TORQUE CHECKS AND ADJUSTMENTS

1. Using a cassette torque meter, check that reel torque at each tape transport operation is within the following specified range.

Take-up	25 ~ 60 g-cm (0.34 ~ 0.83 oz-inch)
*Back Tension	0.40 ~ 0.56V
Fast Forward/ Rewind	90 ~ 160 g-cm (1.25 ~ 2.22 oz-inch)

***Back Tension**

1. Connect a DC voltmeter between TP.4 and TP.GND on the main PC board.
2. Play the middle part of test tape MTT-5511 and adjust R42 so that the voltmeter shows the values in the above table.

4-4 TAPE SPEED ADJUSTMENT

1. Connect a frequency counter to the deck as shown in Fig. 4-7.
2. Playing the mid portion of an MTT-111 test tape, adjust the semi-fixed resistor on capstan motor so that tape speed becomes 3,000 Hz ±5 Hz. An insulated and non-metallic flat-head screwdriver should be used for this adjustment.
3. Check that the following values are obtained at the beginning and at the end of the tape.
   Deviation: 3,000 Hz ±45 Hz
   Width of deviation: Within 30 Hz

4-5 WOW AND FLUTTER CHECKS

Note: These measurements should be made at the beginning, middle and the end of the tape.

4-5-1 PLAYBACK METHOD

1. Connect a wow and flutter meter to the deck as shown in Fig. 4-7.
2. Load a TEAC MTT-111 test tape or equivalent and, play it to measure the wow and flutter value.
3. Specifications are shown below.
   0.05% WRMS

4-3 リール・トルク確認及び調整

1. カセット型トルク・メータによる測定値が下表の範囲内であることを確認する。

テイクアップ・トルク	25~60 g・cm
* バックテンション・トルク	0.40~0.56V
早送りトルク (F.F., REW共)	90~160g・cm

*** バック・テンション**

1. DC 電圧計を MAIN PCB の TP.4 と TP.GND に接続する。
2. テスト・テープ MTT-5511 の中央付近を再生し，電圧計の指示が上表の値になるよう R42 を調整する。

4-4 テープ速度調整

1. Fig.4-7 のように周波数カウンタをデッキに接続する。
2. MTT-111テスト・テープの中間部を再生して，テープ速度が3,000Hz±5Hzになるように キャプスタン・モータの半固定抵抗を調整する。調整には絶縁された非金属製マイナス・ドライバを使用すること。
3. テープの巻始めと巻終りにて 下記の値が得られることを確認する。
   偏差： 3,000Hz±45Hz
   変動巾： 30Hz 以内

4-5 ワウ・フラッタ確認

注意： テープの巻始め，中間，巻終りでそれぞれ測定する。

4-5-1 再生法

1. Fig.4-7 のようにワウ・フラッタ・メータをデッキに接続する。
2. TEAC MTT-111テスト・テープ又は相当品を装てん後，再生しワウ・フラッタ値を測定する。
3. 規格 0.05% WRMS (聴感補正)

4-5-2 RECORD/PLAYBACK METHOD

Note: When measuring with this method, the recorded section should be played back repeatedly to obtain an average value. Be careful not to read the meter for those parts of the tape in which wow and flutter components in recording and playback cancel each other.

4. Load a blank TEAC MTT-5521 test tape or equivalent and record a 3,000 Hz signal.
5. Rewind the tape to the beginning of the recorded section, and play it.
6. The wow and flutter should not be more than specified.
   Specification: 0.2% RMS

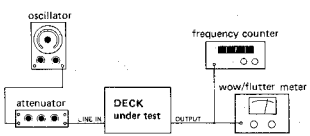


Fig. 4-7 Connection for tape speed, wow and flutter
テープ速度，ワウ・フラッタ測定接続図

4-6 LUBRICATION

Lubrication is only required when parts are replaced. For this purpose, use the oil and grease specified below.

Oil: TEAC TZ-255A motor oil (from TEAC TZ-255 oil kit), Mobil D.T.E. Oil Light, or equivalent

Grease: ORE-LUBE G1/3 or equivalent

1. Apply a drop of oil with an oil applicator to a point about 1/3 the way down the shaft (from the free end) of the flywheel, then insert the shaft into the capstan housing.
2. Apply a suitable amount of light grease to the well of the flywheel bearing.

4-7 VOLTAGE CONVERSION (FOR GENERAL EXPORT MODELS)

ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE CHANGES.

1. Locate the voltage selector on the rear panel of the deck as shown in the illustration.
2. Using a regular screwdriver, turn the selector until the numerals corresponding to the voltage requirements of your area appear.

4-5-2 録再法

注意： 本測定法の場合，録音した部分を幾度かストップ，再生を繰返し，大きく振れる平均的な値を読む。録音した時と再生した時のワウ・フラッタ成分の位相がキャンセルしたところを読まないようにする。

4. ブランク・テスト・テープTEAC MTT-5521又は相当品を装てんし，3,000Hz信号を録音する。
5. テープの録音した部分を巻戻して再生する。
6. ワウ・フラッタ値は下記の値から外れないこと。
   規格： 0.2%RMS(非聴感補正)

4-6 注油

注油は部品が交換される時のみ必要です．注油には下記に明示するオイルとグリースを使用します．

オイル： TEAC TZ-255Aモータ・オイル(TEAC TZ-255オイル・キットから)
モービルD・T・Eオイル・ライト，または相当品

グリース：オア・ルーブG1/3，または相当品

1．フライホイル軸の先端から約1/3下った軸面へ，注油器にてオイル1滴を注油後，フライホイル軸をキャプスタン・ハウジングへそう入する．

2．適量のグリースをフライホイル・ベアリング受けへつける．

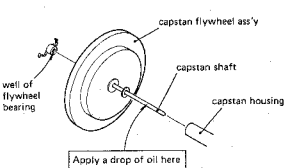


Fig. 4-8

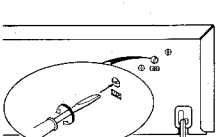


Fig. 4-9 Voltage conversion

5 ELECTRICAL CHECKS AND ADJUSTMENTS

アンプ部の確認と調整

5-1 PRECAUTIONS

1. Since this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.
2. Before performing adjustments and checks, clean and demagnetize the entire tape path, then check tape motion condition.
3. Make sure the deck is properly set for the voltage in your locality.
4. In general, adjustments and checks are made in the order of L-ch then R-ch.
   Double REF. Nos. such as R12/R22 indicate L-ch/R-ch.
5. The AC voltmeter used in the procedures must have an input impedance of 1 MΩ or more.
6. 0 dB is referenced to 0.775 V.

5-1 準備

1. 本機はテープ・セレクタ自動検出機構になっていますので，テスト・テープは必ずテープ・ポジション検出孔のあるものを使用してください。
2. アンプ部の調整のまえに，消去ヘッド，録・再ヘッド，テープ走行部分それぞれを充分清掃し，クリーナ液で清掃してテープ走行状態を確認する。
3. 特に指定の無い限り，調整及びチェックはL-ch，R-chの順序で行って下さい。
   尚R12／R22のように記されている回路番号はL-ch／R-chを示します。
4. レベル計は入力インピダンス1MΩ以上のものを使用して下さい。
5. 0dB=0.775V

5-2 TEAC TEST TAPES

MTT-150: For Dolby level calibration
MTT-356: For playback frequency response check for CrO_2, METAL
MTT-256: For playback frequency response check for NORMAL
MTT-5571: For METAL record test
MTT-5561: For CrO_2 record test
MTT-5511: For NORMAL record test

5-2 TEACテスト・テープ

MTT-150： ドルビー・レベル・セット用
MTT-356： CrO_2,METALテープの再生周波数特性測定用
MTT-256： NORMALテープの再生周波数特性測定用
MTT-5571: METALテープの録音系テスト用
MTT-5561: CrO_2テープの録音系テスト用
MTT-5511: NORMALテープの録音系テスト用

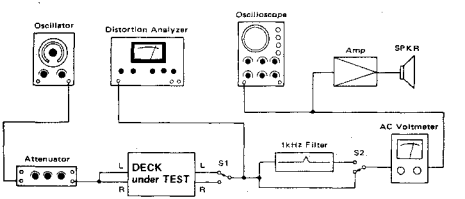
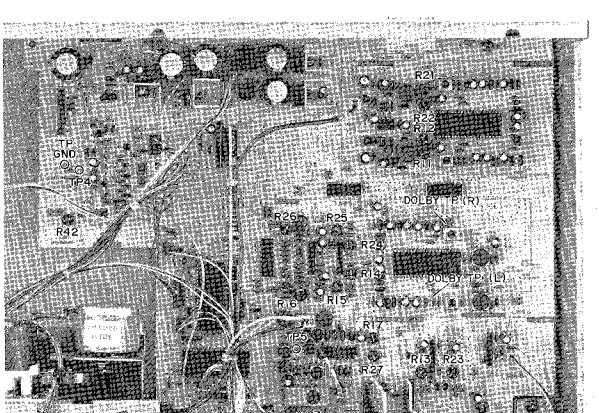


Fig. 5-1 Basic test setup 基本測定接続図



R11 / R21	Playback EQ
R12 / R22	Playback output level
R13 / R23	Meter level
R14 / R24	Record EQ
U123	Bias oscillator

R15 / R25	Record level (NORMAL)
R16 / R26	Record level (METAL)
R17 / R27	Record bias
R42	Back tension

Fig. 5-2 Check and adjustment points on MAIN PCB

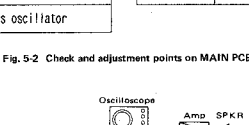


Fig. 5-3 Test setup for azimuth check
位相測定接続図

5-3. PLAYBACK PERFORMANCE
再生系

Deck settings
Mode : PLAY
NR SYSTEM sw. : OUT
HPX FILTER sw. : OUT

TEAC test tapes :
MTT-150 : For Dolby level calibration
MTT-256 : For playback frequency response check for NORMAL
MTT-356 : For playback frequency response check for METAL and CrO_2
MTT-5511 : For S/N check for NORMAL

ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT. RESULT 測定個所・調整値	REMARKS 備 考
1. REC・PLAY head azimuth 録・再ヘッド アジマス	Connection : Fig. 5-3	MTT-150	Check	OUTPUT (L/R) : Phase : Within 45° 位相 : 45° 以内	Fig. 5-5
		MTT-256 or MTT-356 (10 kHz)	Azimuth screws of R・P head 録・再ヘッドの アジマス調整ネジ (Fig.5-4)	OUTPUT (L/R) : Phase between L-ch and R-ch : 0° Maximumx output at L & R-ch's. L-R 間の位相差が 0° で 且つ各 ch 共最大出力	
2. Playback output level 再生出力レベル	Same as above 同上	MTT-150	R12 / R22	OUTPUT (L/R) : -5 dB (436 mV)	
3. Meter level setting メータ・レベル セット	Connection : Fig. 5-1	MTT-150	R13 / R23	PEAK LEVEL meter (L/R) : 0 dB (RED) lit 0 dB (赤) 点灯	
4. Playback frequency response 再生周波数特性	Connection : Fig. 5-1	MTT-256 (MTT-356)	R11 / R21	OUTPUT (L/R) : Nealy equal. output level at 351 Hz and 10 kHz 315 Hz と 10 kHz の出力がほぼ等しくなるよう調整 Standerd 規格 : Fig. 5-6	
5. Playback S/N ratio 再生 S/N 比	Connection : Fig. 5-1	MTT-5511 (fully demagnetized using bulk tape eraser) (バルク・イレーサで充分消磁されたもの)	Check	OUTPUT (L/R) : S/N 45dB min.	
				-5 dB (436 mV) is reference level 基準レベルは -5 dB (436 mV)	

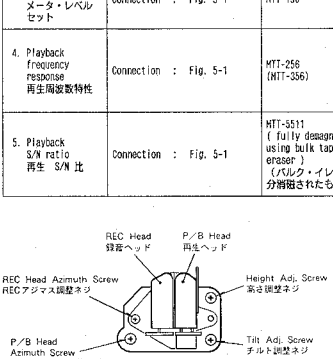


Fig. 5-4

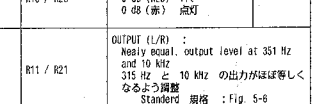


Fig. 5-5 Confirming phase relationship
位相

Fig. 5-6 Playback frequency response
再生周波数特性

5-4. MONITOR PERFORMANCE
モニター系

Deck settings
Mode : RECORD/PAUSE (Except item 11)
MASTER REC LEVEL cont. : Maximum
AUTO MONITOR sw. : SOURCE
NR SYSTEM sw. : OUT
MPX FILTER sw. : OUT

ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整箇所	MEASURING POINT, RESULT 測定箇所・調整値	REMARKS 備 考
6. Min. LINE input level ライン最小入力レベル	Connection : Fig.5-1	LINE IN (L/R) : 400 Hz / -19 dB (86.9 mV)	Check	OUTPUT (L/R) : -5 dB ± 3 dB (308 mV ～ 615 mV)	
7. Specified LINE input level LINE 規定入力レベル	Connection : Fig.5-1	LINE IN (L/R) : 400Hz/-9dB (275mV)	PRESET cont. (L / R)	DOLBY IP (L/R) : -10 dB (245 mV)	
		After adjusting, do not move the PRESET cont. (L/R). (Specific position) 調整後は PRESET つまみを動かさないこと.			
8. MEter level メータ・レベル	Connection : Fig.5-1	LINE IN (L/R) : 400Hz/-9dB (275mV)	Check	PEAK LEVEL meter (L/R) : 0 dB (RED)	
9. PHONES output level PHONES 出力レベル	Connection : Fig. 5 -7 PHONES LEVEL cont. : Max.	LINE IN (L/R) : 400Hz/-9dB (275mV)	Check	PHONES : At each channel 各チャネルで -15 dB ±3 dB (97.5 mV ～ 195 mV)	8Ω load
10. CD level check CD レベル・チェック	Connection : Fig.5-1 STOP mode CD LEVEL CHECK sw. : Set	LINE IN (L/R) : 400 Hz / -12 dB (195 mV)	Check	LED : lit 点灯 PEAK LEVEL meter (L/R) : 0 dB	

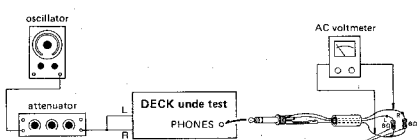


Fig. 5-7 Test setup for PHONES check ホーン出力測定接続図

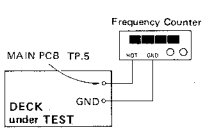


Fig. 5-8 Test setup for bias osc. frequency adjustment
バイアス発振周波数調整用接続図

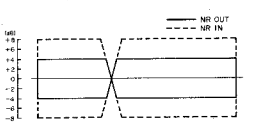


Fig. 5-9 Overall frequency response
録再周波数特性

5-5. RECORDING PERFORMANCE
録音系

Deck settings
MASTER REC LEVEL cont. : Max
AUTO MONITOR sw. : TAPE
NR SYSTEM sw. : OUT
HPX FILTER sw. : OUT
BIAS (L/ R) cont. : Center position. 中央位置
LEVEL (L/ R) cont. : Center position. 中央位置

TEAC recording test tapes
MTT-5571 : For METAL
MTT-5561 : For CrO_2
MTT-5511 : For NORMAL

ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT, RESULT 測定箇所・調整値	REMARKS 備 考
11. Bias osc frequency バイアス発振周波数	Connection : Fig. 5 -8 Tape : MTT-5571 Mode : REC/ PAUSE	– – –	U123	TP. 5 : 100 kHz ±2k kHz	
12. Record EQ 録音 EQ	– – –	– – –	R14 / R24	Set to center position センター位置にする	
13. Recored bias -1 仮バイアスセット	Connection : Fig. 5-1 TAPE : MTT-5571 BIAS cont. : Center LEVEL cont. : Center	LINE IN (L/R) : 400 Hz and 10 kHz alternately / 交互信号 / -42 dB (6.15 mV)	R17 / R27	OUTPUT (L/R) : Equal output level (record and playback) between 400Hz and 10 kHz. 400 Hz と 10 kHz の録再出力が等しくなること	
14. Record azimuth 録音アジマス (V-970X)	〃	LINE IN (L/R) : 10 kHz / -42 dB (6.15 mV)	Azimuth screw of REC head 録音ヘッドのアジマス調整ネジ (Fig. 5-4)	OUTPUT (L/R) : Phase between L-ch/R-ch : 0° L - R 間の位相差が 0° で且つ各チャネル共最大出力	Refer to Fig. 5-5
15. Recored bias -2 バイアス・セット	Connection : Fig. 5-1 TAPE : MTT-5511 BIAS cont. : Center LEVEL cont. : Center	LINE IN (L/R) : 400 Hz and 10 kHz alternately / 交互信号 / -42 dB (6.15 mV)	Check (R17 / R27)	OUTPUT (L/R) : Equal output level (record and playback) between 400Hz and 10 kHz. 400 Hz と 10 kHz の録再出力が等しくなること	
16. Record level 録音レベル	Connection : Fig. 5-1 TAPE : MTT-5511 Connection : Fig. 5-1 TAPE : MTT-5571	LINE IN (L/R) : 400 Hz / -12 dB (195 mV)	R15 / R25 R16 / R26	OUTPUT (L/R) : Output level (record and playback) 録再出力 -8 dB (300 mV)	
17. Total harmonic distortion 総合歪率	Connection : Fig. 5-1 TAPE : MTT-5571 TAPE : MTT-5561 Connection : Fig. 5-1 TAPE : MTT-5511	LINE IN (L/R) : 400 Hz / -12 dB (195 mV)	Check	OUTPUT (L/R) : 2.0 % or less 2.0 % 以下 OUTPUT (L/R) : 2.5 % or less 2.5 % 以下	
18. Overall frequency response 録再周波数特性	Connection : Fig. 5-1 TAPE : MTT-5571 TAPE : MTT-5561 TAPE : MTT-5511	LINE IN (L/R) : 40 Hz ～ 12.5 kHz / -42 dB (6.15 mV)	Check	OUTPUT (L/R) : Standard Fig.5-9	

ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT, RESULT 測定個所・調整値	REMARKS 備 考
19. Overall S/N ratio 総合 S/N 比	Connection : Fig. 5-1 TAPE : MTT-5571 TAPE : MTT-5561 TAPE : MTT-5511	- - -	Check	OUTPUT (L/R) : METAL 45 dB min. Cr O_2 45 dB min. NORMAL 44 dB min. 400 Hz / -9 dB (275 mV) is the reference level. 基準レベルは 400 Hz / -9 dB (275 mV)	
20. Erase efficiency 消去効果	Connection : Fig. 5-1 but engage 1-kHz filter 1-kHz フィルター使用 TAPE : MTT-5571	LINE IN (L/R) : 1 kHz / +1 dB (0.869 V)	Check	OUTPUT (L/R) : 65 dB min. ratio	
	Record a 1 kHz signal. Erase the latter half of the recording. Rewind and play to fined the difference between the 1 kHz portion and the erased portion. 録音部分を再生した時のレベルを基準レベルとし，録音部分を消去した時の出力レベルとの差を測定.				
21. REC MUTE function REC MUTE 効果	Same as above 同 上	Same as above 同 上	Check	OUTPUT (L/R) : 65 dB min. ratio	
	Record a 1-kHz signal. Push REC MUTE bitoon midway. Rewind and play to find the difference between the 1-kHz portion and the "rec mute" portipon. 1 kHz 信号を録音し，途中で REC MUTE 釦を押して無信号録音部分を作る. このテープを再生し，1 kHz 部分と無信号部分との出力レベル差を測定.				
22. Channel separation チャネル・セパレーション	Same as above 同 上	LINE IN : L ch 1-kHz/-9dB (275 mV) R ch No signal 無信号	Check	OUTPUT (R) : 30 dB min. ratio	
	Set the deck to record mode. Rewind and play to find the difference between the 1-kHz recorded portion (L-ch) and " no signal " portion (R-ch). 録音後，再生して 1-kHz 録音部分 (L-ch) と無信号録音部分 (R-ch) との出力レベル差を測定.				
	Change the above connection and check reverse operation also. L-ch と R-ch を入れ替えた場合についてもチェックすること.				
23. Adjucent track crosstalk トラック間クロストーク	Connection : Fig. 5-1 but do not connect LINE (L) and OUTPUT (L) L ch の入出力の接続不要	LINE IN : L ch No signal 無信号 R ch 125Hz/-9dB (275mV)	Check	OUTPUT (R) : 40 dB min. ratio	
	Record a 125-Hz signal on R-ch track and note output level. Invert tape4 and play R-ch track. Check leakage level against the output reference of previously recorded porton. R-ch トラックに 125 Hz を録音し，その再生出力を基準レベルとする. 次にテープを反転し，再生した時の R-ch 出力レベルと基準レベルとの差を測定.				

PARTS LIST SECTION

NOTES:

1. As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawings included in this brochure.
2. Parts marked with △ this sign are safety critical components. They must always be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

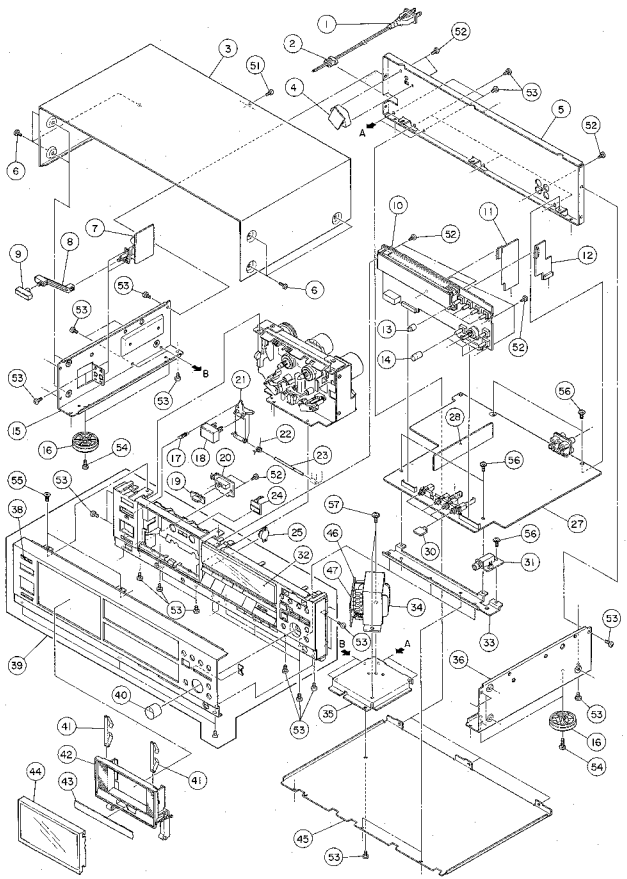
注 意

1. 標準の抵抗，コンデンサーは省略してあります。回路図及び基板図を参照してください。
2. △印は安全規格重要部品です。交換するときは必ずティアック指定の部品を使用して下さい。

6 EXPLODED VIEWS AND PARTS LIST

分解図とパーツ・リスト

EXPLODED VIEW-1



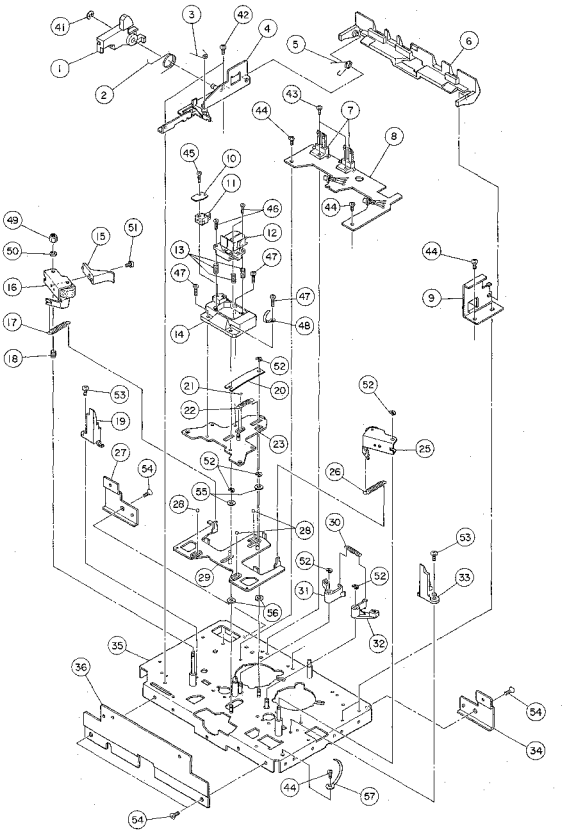
EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
1- 1	△*5128027000	CORD, AC [J]	
	△*5128047000	CORD, AC [UK]	
	△*5350008300	CORD, AC [A]	
	△*5350010700	CORD, AC SPT-2 [US,C]	
	△*5350010800	CORD, AC SPT-1 [GE,MIL]	
	△*5350011700	CORD, AC CLASS-2 [E]	
1- 2	△*5317003400	BUSHING 2271	
1- 3	*5800956700	COVER, TOP	
1- 4	*5200225000	VOLTAGE SELECTOR PCB ASSY [GE,MIL]	Ref. pages 24 & 27
1- 5	*5800835002	PANEL, REAR(B)	
1- 6	*5800612400	SCREW, BONNET; M3X8 (BLK)	
1- 7	*5200224900	POWER SW. PCB ASSY [J,US,C,GE,MIL]	Ref. pages 24 & 27
	*5200224910	POWER SW. PCB ASSY [E,UK,A]	Ref. pages 24 & 27
1- 8	*5800953600	ROD, POWER SWITCH	
1- 9	5800957400	BUTTON (E), POWER	
1-10	*5200241800	DISPLAY PCB ASSY	Ref. pages 23 & 26
1-11	*5200241400	JOINT PCB (A) ASSY	Ref. pages 23 & 26
1-12	*5200224400	JOINT PCB (B) ASSY	Ref. pages 23 & 26
1-13	5800952700	KNOB (A), VOLUME	
1-14	5800952800	KNOB (B), VOLUME	
1-15	*5800809402	CHASSIS, (L)	
1-16	*5801007200	FOOT ASSY	
1-17	*5791234130	SPRING, 2341-30	
1-18	5800957500	BUTTON (C), EJECT	
1-19	5800961500	KNOB, (A); SWITCH	
1-20	*5200241500	TIMER SWITCH PCB ASSY	Ref. pages 24 & 27
1-21	*5800740701	ARM, EJECT	
1-22	*5800775200	SPRING, HOLDER(B)	
1-23	*5800744500	SHAFT, HOLDER	
1-24	5225015100	LED, SLF301C	
1-25	5800620500	DAMPER ASSY	
1-27	*5200241300	MAIN PCB ASSY	Ref. pages 22 & 25
1-28	*5200241600	JOINT PCB (C) ASSY	Ref. pages 22 & 26
1-30	5800953201	BUTTON, PUSH	
1-31	*5200225300	JACK PCB ASSY	Ref. pages 24 & 27
1-32	*5800952000	WINDOW, FL DISPLAY	
1-33	*5800954100	BRACKET, PCB	
1-34	△ 5320045000	TRANSFORMER, POWER [J]	
	△ 5320045100	TRANSFORMER, POWER [US,C]	
	△ 5320045200	TRANSFORMER, POWER [GE,MIL]	
	△ 5320045300	TRANSFORMER, POWER [E,UK,A]	
1-35	*5800954200	BRACKET, TRANSFORMER; POWER	
1-36	*5800809301	CHASSIS, (R)	
1-39	*5801048700	ESCUTCHEON ASSY (C), FRONT	
1-40	5800952900	VOLUME KNOB ASSY (C)	
1-41	5800603801	SPRING, CASSETTE PRESS	
1-42	*5800739202	HOLDER, CASSETTE	
1-43	*5800953400	PLATE (B), HOLDER	
1-44	5800739301	COVER, CASSETTE HOLDER	
1-45	*5800809601	COVER, BOTTOM	
1-46	*5210225100	TRANSFORMER PCB (1)	
1-47	*5210224500	TRANSFORMER PCB (2)	
1-51	*5783613008	SCREW, C-TITE M3X8 (BLK Ni)	
1-52	*5783543008	SCREW, BIND P-TITE M3X8 BL	
1-53	*5783593006	SCREW, BIND S-TITE M3X6 BL	
1-54	*5783593008	SCREW, BIND S-TITE M3X8 BL	
1-55	*5783043008	SCREW, FLAT S-TITE M3X8	
1-56	*5783073006	SCREW, PAN S-TITE CUP M3X6	
1-57	*5783074008	SCREW, PAN S-TITE CUP M4X8	

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN [MIL]:US MILITARY

Parts marked with *require longer delivery time.

EXPLODED VIEW-2

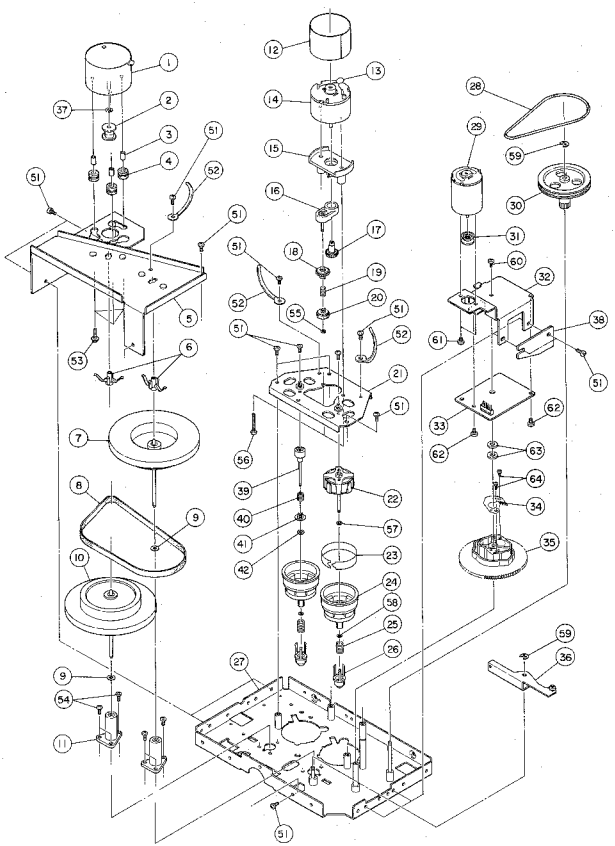


EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
2- 1	*5800768700	LEVER, CASSETTE LOCK	
2- 2	*5800616300	SPRING, LOCK LEVER	
2- 3	*5800616400	SPRING, EJECT PREV. PLATE	
2- 4	*5800731700	BRACKET ASSY, SW. ARM; (L)	
2- 5	*5800755800	SPRING, PRESSURE ARM	
2- 6	*5800595602	ARM, SWITCH PRESSURE	
2- 7	5301753500	SWITCH, LEAF; LSA-2125	
2- 8	*5200182400	SENSOR PCB ASSY	Ref. pages 24 & 27
2- 9	*5800594000	BRACKET, (R)	
2-10	*5800955100	COVER, ERASE HEAD	
2-11	5378904900	HEAD, ERASE; HAJWB3507A	
2-12	5800931401	HEAD ASSY	
2-13	*5800931300	SPRING, HEAD	
2-14	*5800955900	BRACKET, HEAD	
2-15	5800956000	GUIDE, TAPE	
2-16	5800955200	ARM ASSY, PINCH ROLLER (L)	
2-17	5800955700	SPRING, PINCH ROLLER (L)	
2-18	*5800418400	SPRING, ARM; PINCH ROLLER	
2-19	5800595701	GUIDE, CASSETTE (L)	
2-20	*5800595500	SPRING, PRESSURE	
2-21	*5540059000	BALL, STEEL PI 2	
2-22	*5801005700	SPRING, HEAD BASE	
2-23	*5800957200	BASE ASSY, HEAD	
2-24	Vacant		
2-25	5800955400	ARM ASSY, PINCH ROLLER (R)	
2-26	5800955800	SPRING, PINCH ROLLER (R)	
2-27	*5800953900	BRACKET, MECHANISM; (B)	
2-28	*5540056000	BALL, STEEL PI 3	
2-29	*5800618202	SLIDER ASSY	
2-30	*5800737200	SPRING, LOCK	
2-31	*5800620000	ARM ASSY, BRAKE (L)	
2-32	*5800619900	ARM ASSY, BRAKE (R)	
2-33	5800595801	GUIDE, CASSETTE (R)	
2-34	*5800953800	BRACKET, MECHANISM (A)	
2-35		CHASSIS ASSY, MECHANISM (D)	
2-36	*5800954000	BRACKET, MECHANISM (C)	
2-41	*5786003000	WASHER, E-RING E-3 (JIS)	
2-42	*5783032604	SCREW, BIND S-TITE M2.6X4	
2-43	*5783032005	SCREW, BIND S-TITE M2X5	
2-44	*5783002605	SCREW, PAN S-TITE M2.6X5	
2-45	*5780022008	SCREW, BIND M2X8 (BLK.Ni)	
2-46	*5780112008	SCREW, PAN M2X8(Ni)	
2-47	*5780002005	SCREW, BIND M2X5	
2-48	*5786710300	HARNESS CLIP, 2X4.5X42	
2-49	*5781952600	NUT, NYLON M2.6	
2-50	*5800978900	WASHER, 2.9X5X0.8T	
2-51	*5780132605	SCREW, PAN SEMS (A) M2.6X5	
2-52	*5786002000	WASHER, E-RING E-2 (JIS)	
2-53	*5783032606	SCREW, BIND S-TITE M2.6X6	
2-54	*5783043008	SCREW, FLAT S-TITE M3X8	
2-55	*5785313100	WASHER, POLYSL. 3X9X0.5T	
2-56	*5785313000	WASHER, POLYSL. 3X6X0.5T	
2-57	*5786713000	CLIP, HARNESS 3.0X9.1X50	

Parts marked with *require longer delivery time.

EXPLODED VIEW-3



EXPLODED VIEW-3

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
3- 1	5370007800	MOTOR, DC CAPSTAN; SHL2L	
3- 2	5801006500	PULLEY, CAPSTAN MOTOR	
3- 3	*5785603050	SPACER, 3.0X5.0MM	
3- 4	*5534537000	CUSHION, RUBBER	
3- 5	*5800956200	BRACKET, FLYWHEEL	
3- 6	*5800236900	BEARING, THRUST	
3- 7	5800732200	CAPSTAN ASSY (L)	
3- 8	5534810000	BELT, CAPSTAN	
3- 9	*5800733300	WASHER, THRUST	
3-10	5800732300	CAPSTAN ASSY (R)	
3-11	5800732100	HOLDER ASSY, METAL	
3-12	*5800235900	PLATE, SHIELD	
3-13	*5173395000	C., CERAMIC 0.047UF/50V	
3-14	5370002502	MOTOR, REEL DC .015 0.2	
3-15	*5800732602	HOLDER, MOTOR	
3-16	5800461500	ARM ASSY, PULLEY	
3-17	5800736000	PULLEY, GEAR (A)	
3-18	5800461600	PULLEY (B) ASSY, GEAR	
3-19	*5800430200	SPRING, PULLEY	
3-20	5800430302	IDLER ASSY	
3-21	*5800731600	BRACKET, REEL ASSY	
3-22	5347003300	SHAFT ASSY, COIL	
3-23	*5800731400	RING, HYSTERISIS	
3-24	5800731500	TABLE ASSY, REEL	
3-25	*5800231300	SPRING, REEL	
3-26	*5800236501	RING, DRIVE	
3-27	Vacant		
3-28	5800419200	BELT, CAM CONTROL	
3-29	5370005100	MOTOR, CAPSTAN	
3-30	5800597001	PULLEY, REDUCTION	
3-31	5800123301	PULLEY, V	
3-32	*5800732400	BRACKET, CAPSTAN MOTOR	
3-33	*5210152401	PCB, CAM	
3-34	*5800595300	SWITCH, CAM PLATE; CONTACT	
3-35	*5800597401	CAM, CONTROL	
3-36	*5800620701	BASE ARM ASSY	
3-37	*5801008000	WASHER, OIL	
3-38	*5801006400	STOPPER, E	
3-39	*5800917400	SHAFT ASSY, REEL	
3-40	*5800481901	SPRING, (B) TENSION	
3-41	*5800231500	HOLDER, SPRING	
3-42	*5800539800	WASHER, TEFLON 1.7X4X0.3T	
3-51	*5783002605	SCREW, PAN S-TITE M2.6X5	
3-52	*5786713000	CLAMPER, CORD 3.0X9.1X50	
3-53	*5780142608	SCREW, PAN SEMS (B) M2.6X8	
3-54	*5783002606	SCREW, PAN S-TITE M2.6X6	
3-55	*5785331500	WASHER, POLY. 1.5X4X0.5T	
3-56	*5780002617	SCREW, BIND M2.6X17	
3-57	*5785301100	WASHER, POLY. 1.5X4X0.25T	
3-58	*5785331100	WASHER, POLY. 1.2X3.6X0.5T	
3-59	*5786002000	WASHER, E-RING E-2 (JIS)	
3-60	*5780002004	SCREW, BIND M2X4	
3-61	*5780002603	SCREW, BIND M2.6X3	
3-62	*5783032604	SCREW, BIND S-TITE M2.6X4	
3-63	*5785024800	WASHER, FLAT 4.3X8X0.8T	
3-64	*5781112004	SCREW, BIND TAPPING M2X4	

Parts marked with *require longer delivery time.

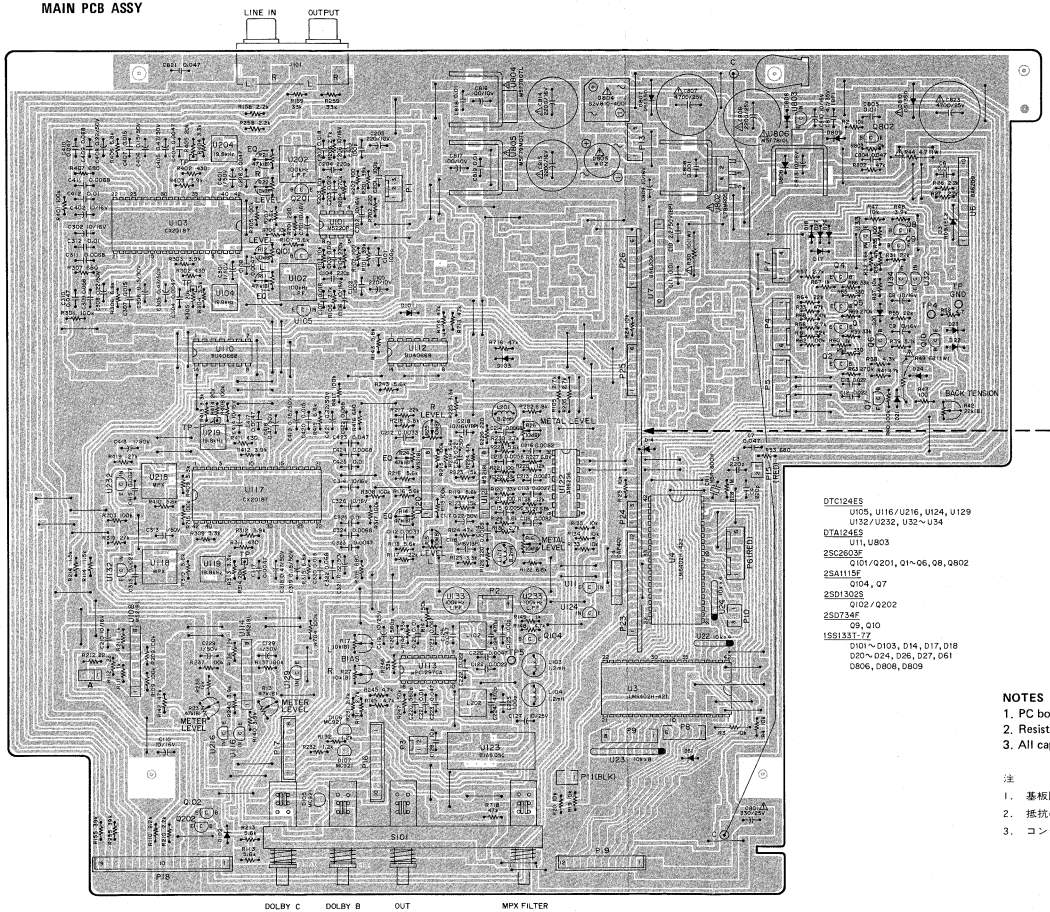
INCLUDED ACCESORIES

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
	*5700102200	OWNER'S MANUAL V-870 [J]	
	*5700102300	OWNER'S MANUAL V-870 [EXCEPT J]	
	*5350011600	CORD, IN-OUT 1.0M	
	*5800954500	BOARD, SIDE; (L) [MIL]	
	*5800954600	BOARD, SIDE; (R) [MIL]	
	*5800954700	SCREW ASSY, BOARD [MIL]	

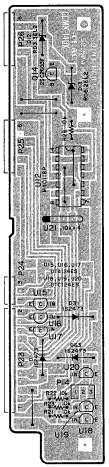
7 PC BOARDS AND PARTS LIST

基板図とパーツ・リスト

MAIN PCB ASSY



JOINT PCB C ASSY



DTC124ES
U105, U116/U216, U124, U129
U132/U232, U32～U34

DTA124ES
U11, U803

2SC2603F
Q101/Q201, Q1～Q6, Q8, Q802

2SA1115F
Q104, Q7

2SD1302S
Q102/Q202

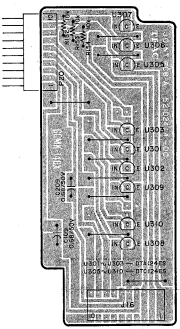
2SD734F
Q9, Q10

1SS133T-77
D101～D103, D14, D17, D18
D20～D24, D26, D27, D61
D806, D808, D809

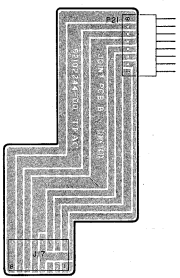
NOTES
1. PC boards are shown viewed from foil side.
2. Resistor values are in ohms (k=kilo-ohms M=megohms).
3. All capacitor values are in microfarads (p=picofarads).

注
1. 基板図はパターン面が示されています。
2. 抵抗の単位はΩ(kΩ, MΩ)です。
3. コンデンサの単位はμF(pF)です。

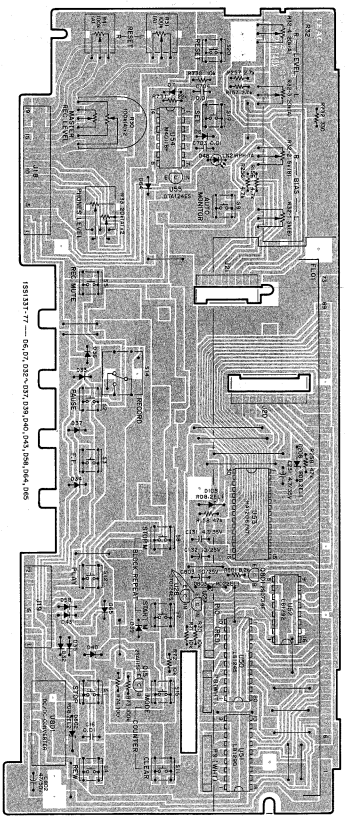
JOINT PCB A ASSY



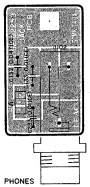
JOINT PCB B ASSY



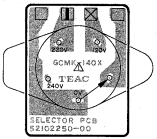
DISPLAY PCB ASSY



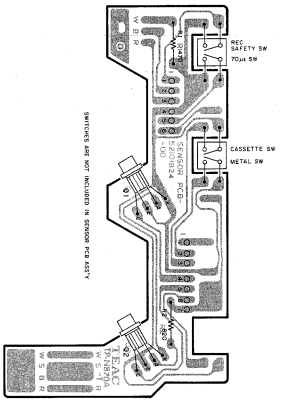
JACK PCB ASSY



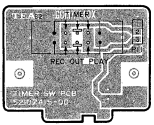
SELECTOR PCB ASSY [General Export]



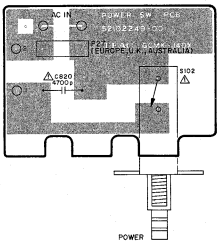
SENSOR PCB ASSY



TIMER PCB ASSY



POWER SW PCB ASSY



MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*5200241300	MAIN PCB ASSY
	*5210241300	MAIN PCB
	*5555590000	PLATE, PCB EARTH;A
	*5800673000	HEAT-SINK
	*5800990100	HEAT-SINK
	*5553132000	HEAT-SINK (C1625-ST (C)
C003,004	5172216000	C., CERAMIC 220PF/50V
C101,201	5263105420	C., POLY. 100PF/100V J
C102,202	5172212000	C., CERAMIC 100PF/50V
C104,204	5172216000	C., CERAMIC 220PF/50V
C120,220	5263107220	C., POLY. 560PF/100V J
C124,224	5263107020	C., POLY. 470PF/100V J
C125,225	5263105420	C., POLY. 100PF/100V J
C128	5173445000	C., CERA. 10PF/50V D
C801	△5260415010	C., ELEC. 330UF/25V M SEM
C806	△5260416810	C., ELEC. 2200UF/25V M SEM
C807	△5260417910	C., ELEC. 4700UF/25V M SEM
C814,815	△5260308600	C., ELEC. 2200UF/16V M PS
C823	△5260417910	C., ELEC. 4700UF/25V M SEM
CR01	5347000900	CERAMIC OSC, KBR-800H
D003	5224575001	DIODE, ZENER RD9.1EL2 FR
D004	5228009200	DIODE, ARRAY DAP401
D014	5224015020	DIODE, 1SS133T-77
D017,018	5224015020	DIODE, 1SS133T-77
D020-024	5224015020	DIODE, 1SS133T-77
D026,027	5224015020	DIODE, 1SS133T-77
D061	5224015020	DIODE, 1SS133T-77
D101-103	5224015020	DIODE, 1SS133T-77
D105-107	5224015220	DIODE, MC921
D804	△5228010800	SILICON STACK, S2VB10
D805	△5228005000	SILICON STACK, W02
D806	5224015020	DIODE, 1SS133T-77
D807,810	△5224013210	DIODE, DS135D FA4
D808,809	5224015020	DIODE, 1SS133T-77
J101	5330510600	JACK, PIN; 4P
L101,201	5286008700	COIL, CHOKE 8.2MH
L102,202	5286025700	COIL, STEP UP
L103	5286006700	COIL, CHOKE 1.2MH
L104	5286006700	COIL, CHOKE 1.2MH
P001	5336126300	CONN. PLUG, 8263-0312 WHT
P002	5336126400	CONN. PLUG, 8263-0412 WHT
P003	5336126200	CONN. PLUG, 8263-0212 WHT
P004	5336126600	CONN. PLUG, 8263-0612 WHT
P005	5336126700	CONN. PLUG, 8263-0712 WHT
P006	5336135600	CONN. PLUG, 8263-0612 RED
P007	5336135400	CONN. PLUG, 8263-0412 RED
P008	5336249600	CONN. PLUG, B06B-PH-K-S WHT
P009	5336249800	CONN. PLUG, B08B-PH-K-S WHT
P010	5336251300	CONN. PLUG, B03B-PH-K-R RED
P011	5336255300	CONN. PLUG, B03B-PH-K-K BLK
P013	5336249500	CONN. PLUG, B05B-PH-K-S WHT
P015	5336251200	CONN. PLUG, B02B-PH-K-R RED
P016	5336280000	CONN. PLUG, 10P IL-SDA-P
P017	5336279800	CONN. PLUG, 8P IL-SDA-P
P018	5336280900	CONN. PLUG, 19P IL-SDA-P

MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
P019	5336280200	CONN. PLUG, 12P IL-SDA-P
Q001,002	5230780920	TRANSISTOR, 2SC2603F
Q004-006	5230780920	TRANSISTOR, 2SC2603F
Q007	5230018920	TRANSISTOR, 2SA1115F
Q008	5230780920	TRANSISTOR, 2SC2603F
Q009,010	5231761300	TRANSISTOR, 2SD734F
Q101,201	5230780920	TRANSISTOR, 2SC2603F
Q102,202	5231761400	TRANSISTOR, 2SD1302S
Q104	5230018920	TRANSISTOR, 2SA1115F
Q802	5230780920	TRANSISTOR, 2SC2603F
R011,021	5280021700	R., TRIMMER 47KB
R012,022	5280021300	R., TRIMMER 10KB
R013,023	5280021700	R., TRIMMER 47KB
R014,024	5280021700	R., TRIMMER 47KB
R015,025	5280021300	R., TRIMMER 10KB
R016,026	5280021300	R., TRIMMER 10KB
R017,027	5280021300	R., TRIMMER 10KB
R030	△5241215510	R., INCOMBUSTBLE 10 1W J
R042	5280021500	R., TRIMMER 22KB
R044	△5241182910	R., INCOMBUSTBLE 4.7 1W J
R049	△5241217510	R., INCOMBUSTBLE 68 1W J
S101	5300049200	SWITCH, PUSH 2-2 N
TP04	5544750000	PIN, CONBINATION
TP05	5544750000	PIN, CONBINATION
U003	5220805300	IC., LM6402H-421
U004	5220805400	IC., LM6402H-422
U006,007	5220427800	IC., BA6209
U011	5232254820	TRANSISTOR, DIGI. DTA124ES
U022	5242118400	R., ARRAY RMLS 4J103
U023	5242118600	R., ARRAY RMLS 8J103
U024	5242118400	R., ARRAY RMLS 4J103
U032-034	5232255720	TRANSISTOR, DIGI. DTC124ES
U101	5220426900	IC., M5220P
U102,202	5292808700	FILTER, LOW PASS 100KHZ
U103	5220427000	IC., CX20187
U104,204	5292807000	FILTER, 19.8KHZ
U105	5232255720	TRANSISTOR, DIGI. DTC124ES
U108	5220416200	IC., M5218L
U110	5220041100	IC., BU4066B
U112	5220041100	IC., BU4066B
U113	5220430400	IC., UPC1297CA
U114	5220416200	IC., M5218L
U116,216	5232255720	TRANSISTOR, DIGI. DTC124ES
U117	5220427000	IC., CX20187
U118,218	5292805600	FILTER, LOWPASS MPX
U119,219	5292807000	FILTER, 19.8KHZ
U120	5220416200	IC., M5218L
U121	5220416200	IC., M5218L
U122	5220039100	IC., AN6256
U123	5292208500	OSC MODULE, 100KHZ
U124,129	5232255720	TRANSISTOR, DIGI. DTC124ES
U132,232	5232255720	TRANSISTOR, DIGI. DTC124ES
U133,233	5292805900	FILTER, LOW PASS 100KHZ
U802	△5220430300	IC., L78MR05
U803	5232254820	TRANSISTOR, DIGI. DTA124ES
U804	△5220432200	IC., M5F78M07L
U805	△5220432900	IC., M5F79M07L
U806	△5220432400	IC., M5F78M10L

Parts marked with *require longer delivery time.

JOINT PCB (C) ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200241600	JOINT PCB (C) ASSY
	*5210241600	JOINT PCB (C)
D001	5224012920	DIODE, 1S2473
D012	5224572001	DIODE, ZENER RD3.3EL2 FR
D013	5224573801	DIODE, ZENER RD6.2EL2 FR
D031,063	5224012920	DIODE, 1S2473
P014	5336249300	CONN., PL. B03B-PH-K-S WHT
P023	5336157200	CONN., PLUG 12P
P024	5336156300	CONN., PLUG 3P
P025	5336156600	CONN., PULG 6P
P026	5336156600	CONN., PLUG 6P
Q014	5230780920	TRANSISTOR 2SC2603F
U012	5220040400	IC., M4011BP
U015,016	5232254820	TRANSISTOR, DIGI. DTA124ES
U017	5232254820	TRANSISTOR, DIGI. DTA124ES
U018,019	5232255720	TRANSISTOR, DIGI. DTC124ES
U020	5232255720	TRANSISTOR, DIGI. DTC124ES
U021	5242118400	R., ARRAY RMLS 4J103

JOINT PCB (A) ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200241400	JOINT PCB (A) ASSY
	*5210241400	JOINT PCB (A)
C109,209	5260411020	C., E. 0.68UF/50V M SEM
J016	5336282000	CONN., SOCKET, 10P IL-SDA-S
P020	5334049400	CONN., PLUG, 10P TYC-BP-AI
U301-303	5232254820	TRANSISTOR, DIGI. DTA124ES
U305,310	5232255720	TRANSISTOR, DIGI. DTC124ES

JOINT PCB(B)ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200224400	JOINT PCB (B) ASSY
	*5210224400	JOINT PCB (B)
J017	5336281800	CONN. SOCKET, 8P IL-SDA-S
P021	5334049300	CONN. PLUG, 8P TYC-BP-AI

DISPLAY PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200241800	DISPLAY PCB ASSY
	*5210241800	DISPLAY PCB
	*5800953500	HOLDER, METER
D006,007	5224015020	DIODE, 1SS133T-77
D032,033	5224015020	DIODE, 1SS133T-77
D034,035	5224015020	DIODE, 1SS133T-77
D036,037	5224015020	DIODE, 1SS133T-77
D039,040	5224015020	DIODE, 1SS133T-77
D048	5225015320	LED, LN21RPH-TA RED
D058,043	5224015020	DIODE, 1SS133T-77
D064,065	5224015020	DIODE, 1SS133T-77
D108,208	5224574601	DIODE, ZENER RD8.2EL1
D802	5224574701	DIODE, ZENER RD8.2EL2
D803	5224577801	DIODE, ZENER RD22EL1
FL01	5347006400	FL DISPLAY, FIP72CW15Y
J018	5336282900	CONN., SOCKET, 19P IL-SDA-S
J019	5336282200	CONN., SOCKET, 12P IL-SDA-S
J020	5334049800	CONN., SOCKET, 10P TYC-BX-AI
J021	5334049700	CONN., SOCKET, 8P TYC-BX-AI
Q015	5230018920	TRANSISTOR, 2SA1115F
Q801	5231761300	TRANSISTOR, 2SD734F
R030	5282413600	VR., 1S-1U 16, 100KAX2
R031,041	5282017400	VR., 1S-1U 9, 100KA
R032	5283505900	VR., 4BLOCK 9, 5KBX2,20KBX2
R033	5282413500	VR., 1S-1U 9, 20KAX2
S001-005	5302103200	SW., TACT KHH10910
S007-009	5302103200	SW., TACT KHH10910
S011,012	5302103200	SW., TACT KHH10910
S014	5302105400	SW., TACT SKHEAB
S015	5302103200	SW., TACT KHH10910
S019,020	5302103200	SW., TACT KHH10910
U028,029	5232255720	TRANSISTOR, DIGI. DTC124ES
U050	5232253200	TRANSISTOR, ARRAY LB1245
U051	5232252900	TRANSISTOR, ARRAY LB1290
U052	5232252800	TRANSISTOR, ARRAY LB1292
U053	5220041000	IC., HA12067NT
U054	5220040400	IC., M4011BP
U055	5232254820	TRANSISTOR, DIGI. DTA124ES
U801	5292208300	DC/DC CONVERTER

Parts marked with *require longer delivery time.

JACK PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200225300	JACK PCB ASSY
	*5210225300	JACK PCB
C132	5173435000	C., CERAMIC 0.047UF/50V Z
C133,233	5173433000	C., CERAMIC 0.01UF/50V T
J102	5330013900	JACK, 3P LGR4502-5000

TIMER SWITCH PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200241500	TIMER SWITCH PCB ASSY
	*5210241500	TIMER SWITCH PCB
S021	5300909600	SWITCH, SLIDE 2-3

POWER SW. PCB ASSY [J,US,C,GE,MIL]

REF. NO.	PARTS NO.	DESCREPTION
	*5200224900	POWER SWITCH PCB ASSY
	*5210224900	POWER SWITCH PCB
C820	⚠ 5267703800	SPARK KILLER, 4700PF/400V M
S102	⚠ 5300046200	SWITCH, PUSH 1-1 SDDLD1

POWER SW. PCB ASSY [E,UK,A]

REF. NO.	PARTS NO.	DESCREPTION
	*5200224910	POWER SWITCH PCB ASSY
	*5210224900	POWER SWITCH PCB
C820	⚠ 5267703800	SPARK KILLER, 4700PF/400V M
P027	5327009200	LAPPING, TERMINAL 2P(P=10)
S102	⚠ 5300046200	SWITCH, PUSH 1-1 SDDLD 1

VOLTAGE SELECTOR PCB ASSY [GE,MIL]

REF. NO.	PARTS NO.	DESCREPTION
	*5200225000	VOLTAGE SELECTOR PCB ASSY
	*5210225000	VOLTAGE SELECTOR PCB
	⚠ 5332016300	SELECTOR, VOLT FS907BB

SENSOR PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200182400	SENSOR PCB ASSY
	*5210182400	SENSOR PCB
	*5800735900	SPACER
Q001,002	5228013100	PHOTO REFLECTOR NJL5141EA-B

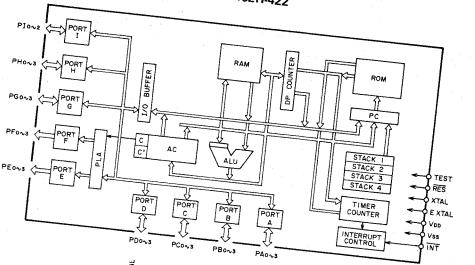
[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN [MIL]:US MILITARY

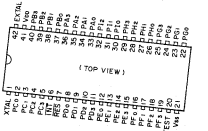
Parts marked with *require longer delivery time.

8 IC BLOCK DIAGRAMS

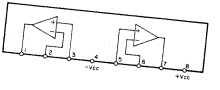
ICブロック・ダイヤグラム

LM6402H-421
LM6402H-422

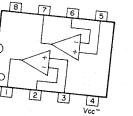




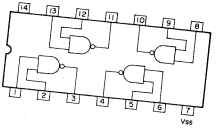
M5218L



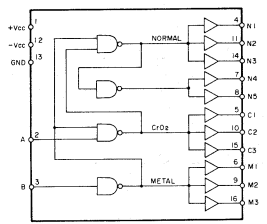
M5220P



M4011BP

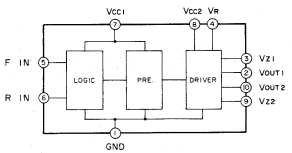


AN6256



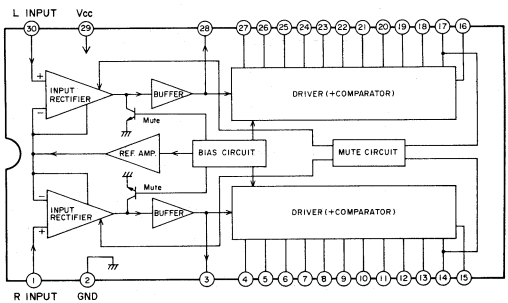
A	B	N1∿N3	N4∿N5	C1∿C3	M1∿M3	TAPE
L	L	L	H	H	H	NORMAL
L	H	H	L	H	L	
H	L	H	L	L	H	CrO2
H	H	H	L	H	L	METAL

BA6209

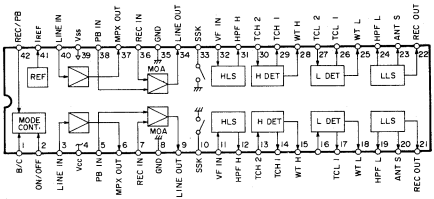


F IN	R IN	VOUT1	VOUT2
H	H	L	L
L	H	L	H
H	L	H	L
L	L	L	L

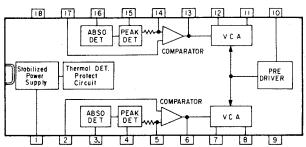
HA12067NT



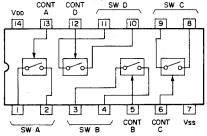
CX20187



μPC1297CA



BU4066B



TEAC SCHEMATIC DIAGRAM V-870

( ) : Rsb

MAIN PCB (2/2)

U101	M5220P
U102 (U202)	L.P.F. (100kHz)
U103	CX20187
U104 (U204)	FILTER (19.8kHz)
U105	DTC124ES
U106	M5218L
U110 , U112	BU4066B
U113	μPC1297CA
U114	M5218L
U116	DTC124ES
U117	CX20187
U118 (U218)	MPX FILTER
U119 (U219)	FILTER (19.8kHz)
U120 , U121	M5218L
U122	AN6256
U123	BIAS OSC (100kHz)
U124	DTC124ES
U129	DTC124ES
U132	DTC124ES
U133 (U233)	BIAS TRAP (100kHz)
Q101 (Q201)	2SC2603F
Q102 (Q202)	2SD1302S
Q104	2SA1115F
D101	ISS133T-77
D102 , D103	ISS133T-77
D105 ∿ D107	MC921

JOINT PCB A

U301 ∿ U303	DTA124ES
U305 ∿ U310	DTC124ES

DISPLAY PCB (2/2)

U28 , U29	DTC124ES
U50	LB1245
U51	LB1290
U52	LB1292
U53	HA12067NT
U801	DC/DC CONVERTER
D108 (D208)	RGB-2EL1
D802	RGB-2EL2
D803	RD22EL1
Q801	2SD734F

INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

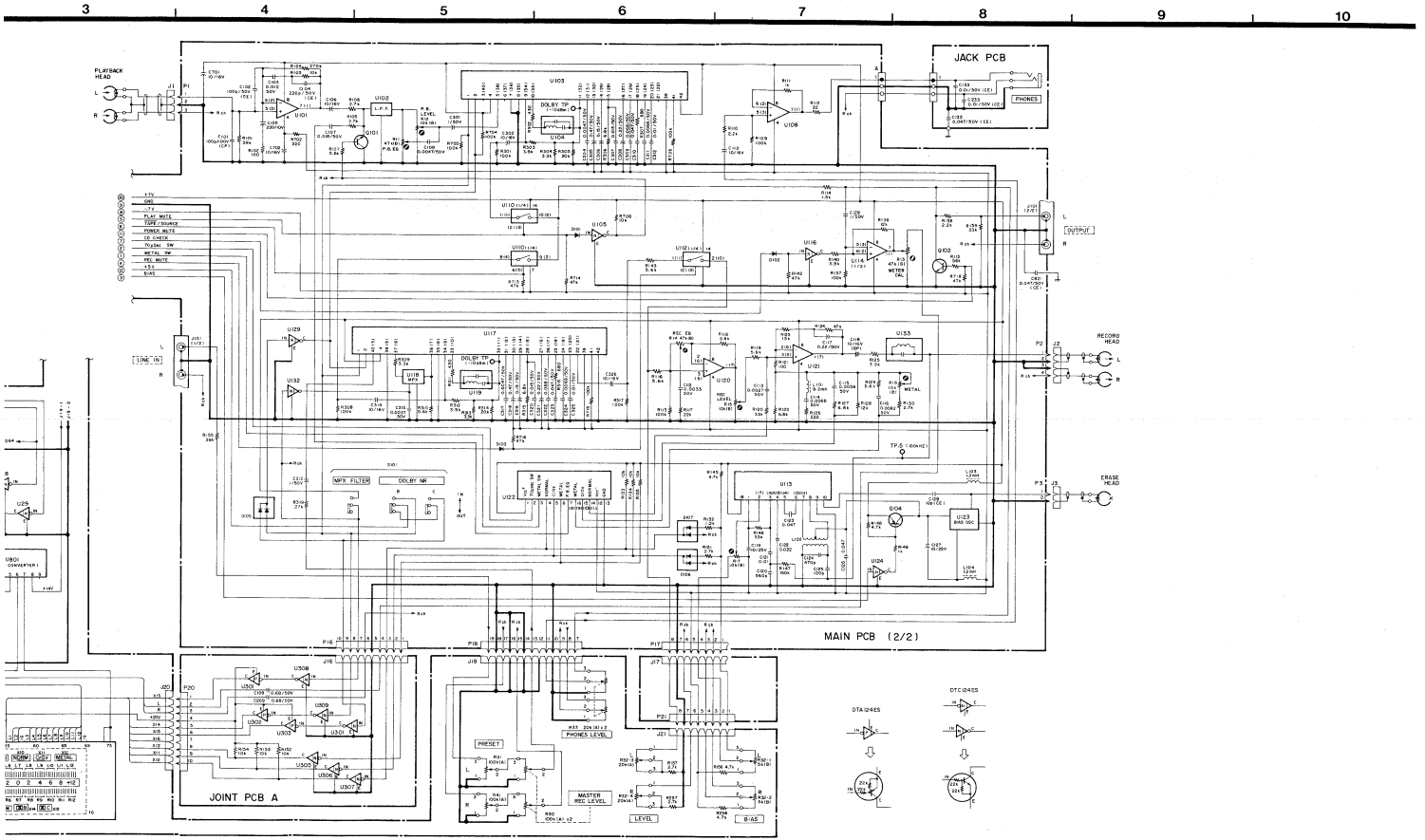
NOTES

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

注意

1. 抵抗の単位はΩ(k=kΩ, M=MΩ)です.
2. コンデンサの単位はμF(p=pF)です.
3. ⚠マークのある部品は安全重要部品です. 交換するときは必ずティアック指定の部品を使用してください.

V-8



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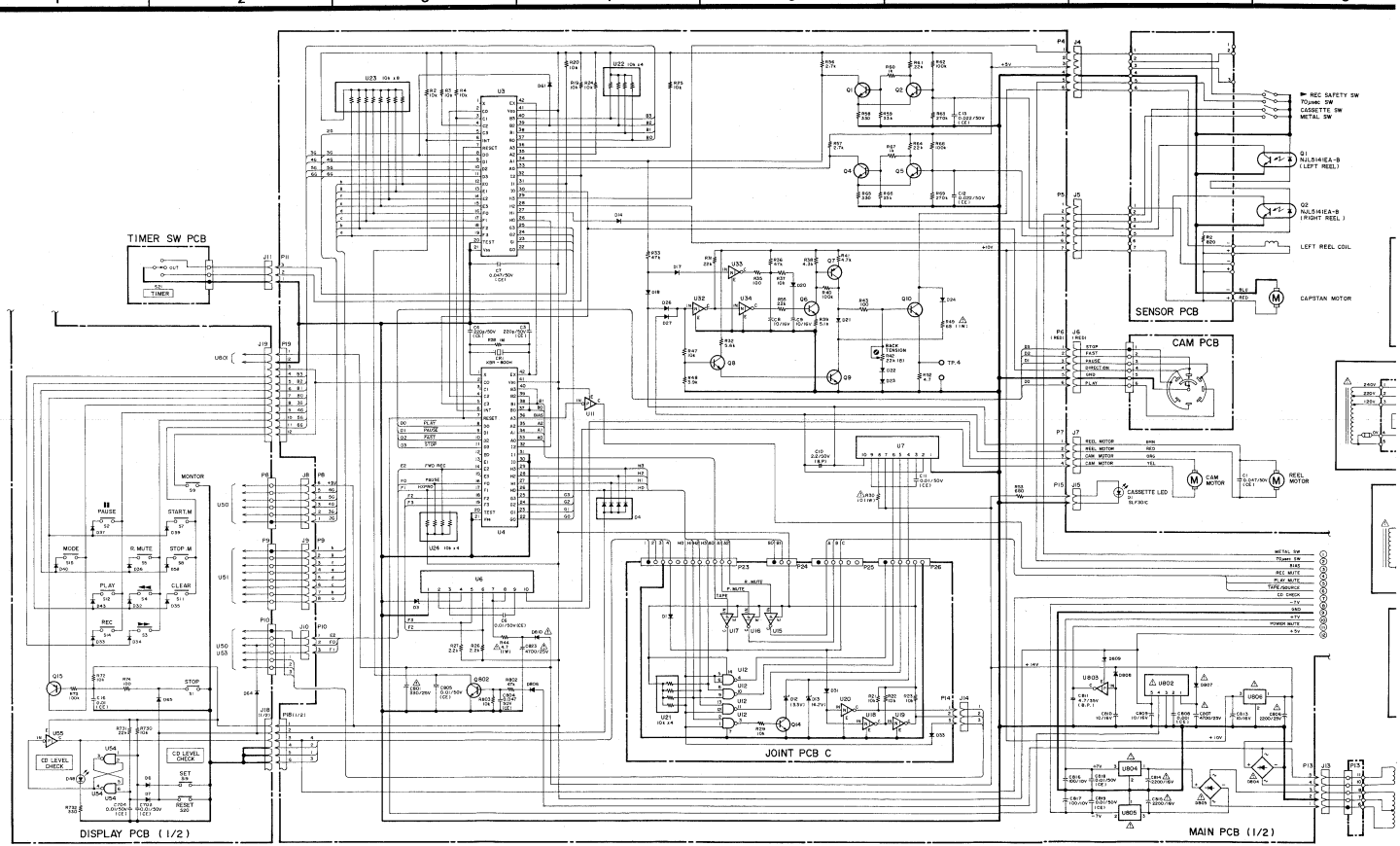
V-870 STEREO CASSETTE DECK

1st Issue; February, 1988

TEAC SCHEMATIC DIAGRAM V-870



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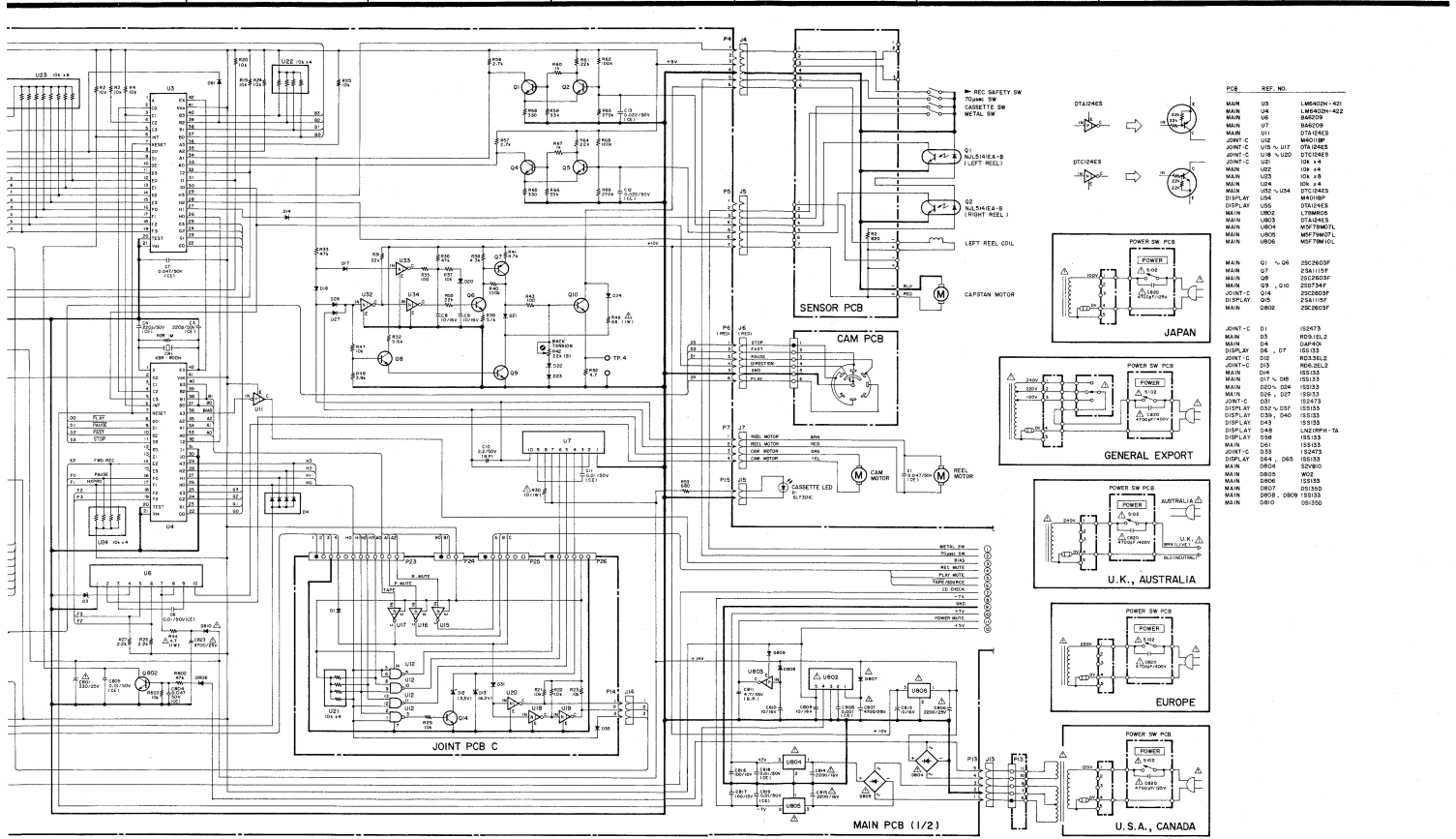

PCB	REF. NO.	
MAIN	U3	LM8402H-421
MAIN	U4	LM8402H-422
MAIN	U6	BA6209
MAIN	U7	BA6209
MAIN	U11	DTA124ES
JOINT-C	U12	MA01BF
JOINT-C	U15 ∿ U17	DTA124ES
JOINT-C	U18 ∿ U20	DTC124ES
JOINT-C	U21	IDs x4
MAIN	U22	IDs x4
MAIN	U23	IDs x8
MAIN	U24	IDs x4
MAIN	U32 ∿ U34	DTC124ES
DISPLAY	U54	M40IBP
DISPLAY	U55	DTA124ES
MAIN	UB02	L78MR05
MAIN	UB03	DTA124ES
MAIN	UB04	M5F78M07L
MAIN	UB05	M5F78M07L
MAIN	UB06	M5F78M10L
MAIN	Q1 ∿ Q6	2SC2603F
MAIN	Q7	2SA1115F
MAIN	Q8	2SC2603F
MAIN	Q9 , Q10	2SD754F
JOINT-C	Q14	2SC2603F
DISPLAY	Q15	2SA1115F
MAIN	QB02	2SC2603F
JOINT-C	D1	IS2473
MAIN	D3	RD9.1EL2
MAIN	D4	DAP40I
DISPLAY	D6 , D7	ISS133
JOINT-C	D12	RD3.3EL2
JOINT-C	D13	RD6.2EL2
MAIN	D14	ISS133
MAIN	D17 ∿ D18	ISS133
MAIN	D20 ∿ D24	ISS133
MAIN	D26 , D27	ISS133
JOINT-C	D31	IS2473
DISPLAY	D32 ∿ D37	ISS133
DISPLAY	D39 , D40	ISS133
DISPLAY	D43	ISS133
DISPLAY	D48	LN21RPH-TA
DISPLAY	D58	ISS133
MAIN	D61	ISS133
JOINT-C	D33	IS2473
DISPLAY	D64 , D65	ISS133
MAIN	DB04	52VB10
MAIN	DB05	W02
MAIN	DB06	ISS133
MAIN	DB07	DB10D
MAIN	DB08 , DB09	ISS133
MAIN	DB10	DB35D

INSTRUCTIONS FOR SERVICE PERSONNEL

URNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPLOSED CCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

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